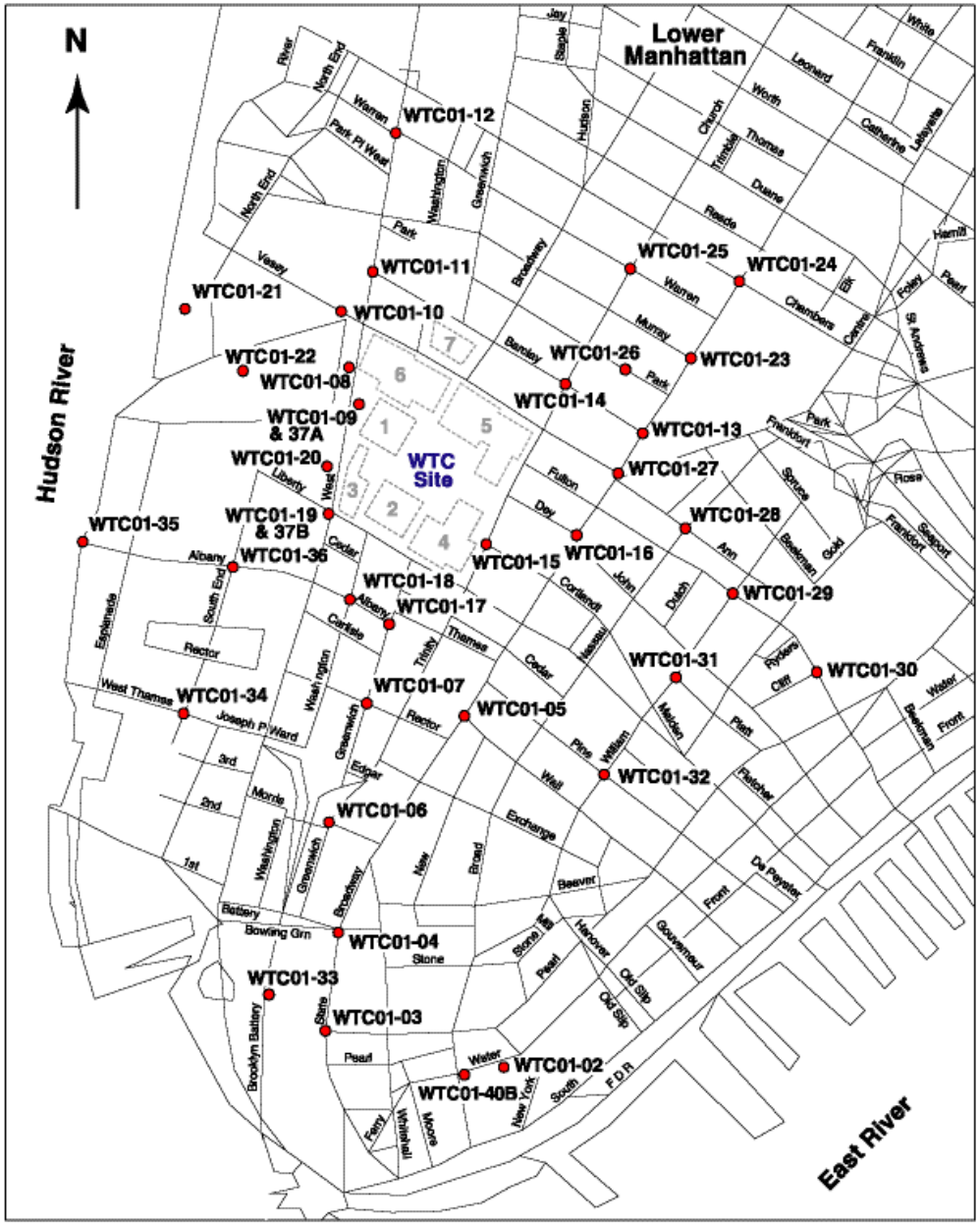
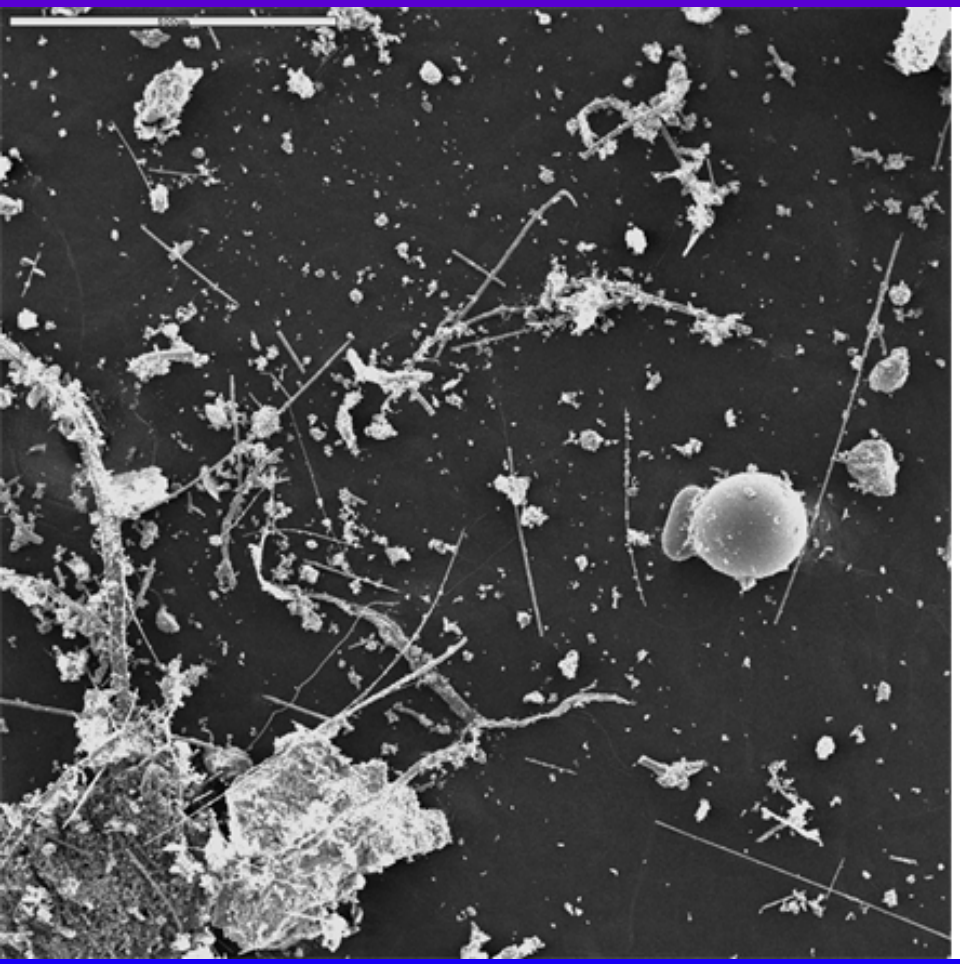
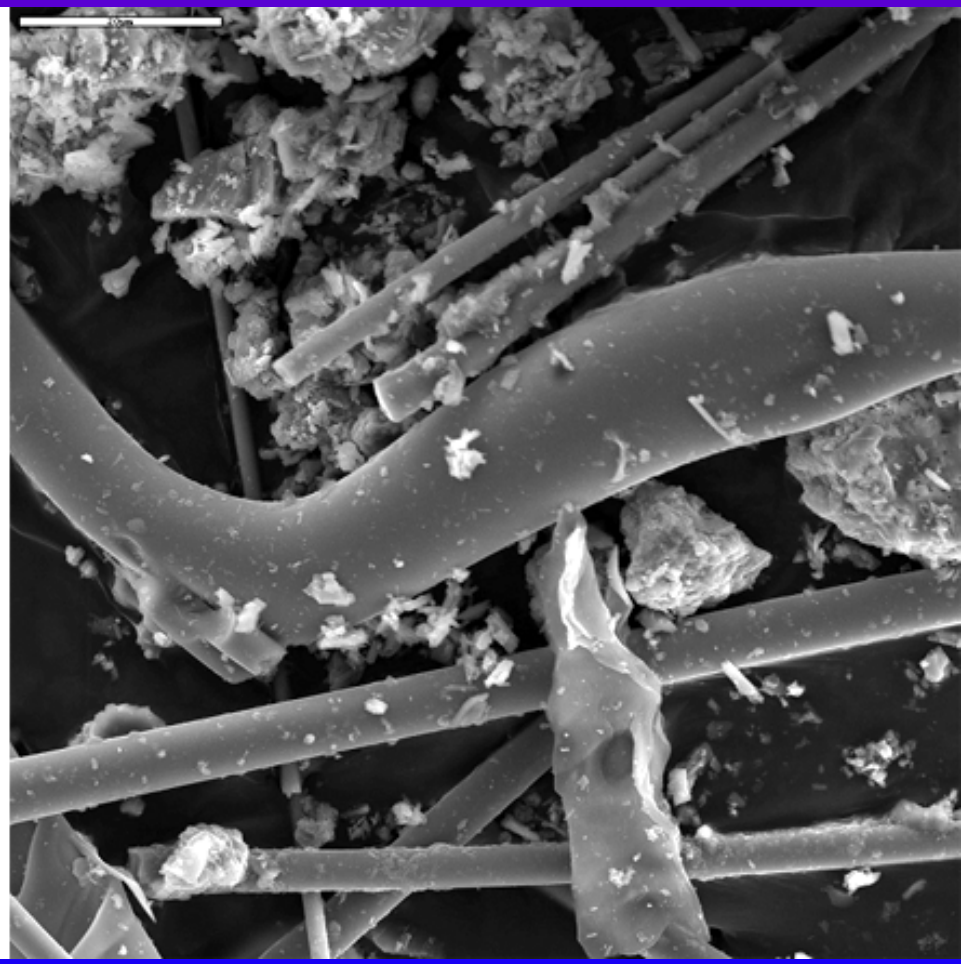
U.S. Geological Survey **World Trade Center Sample Locations**

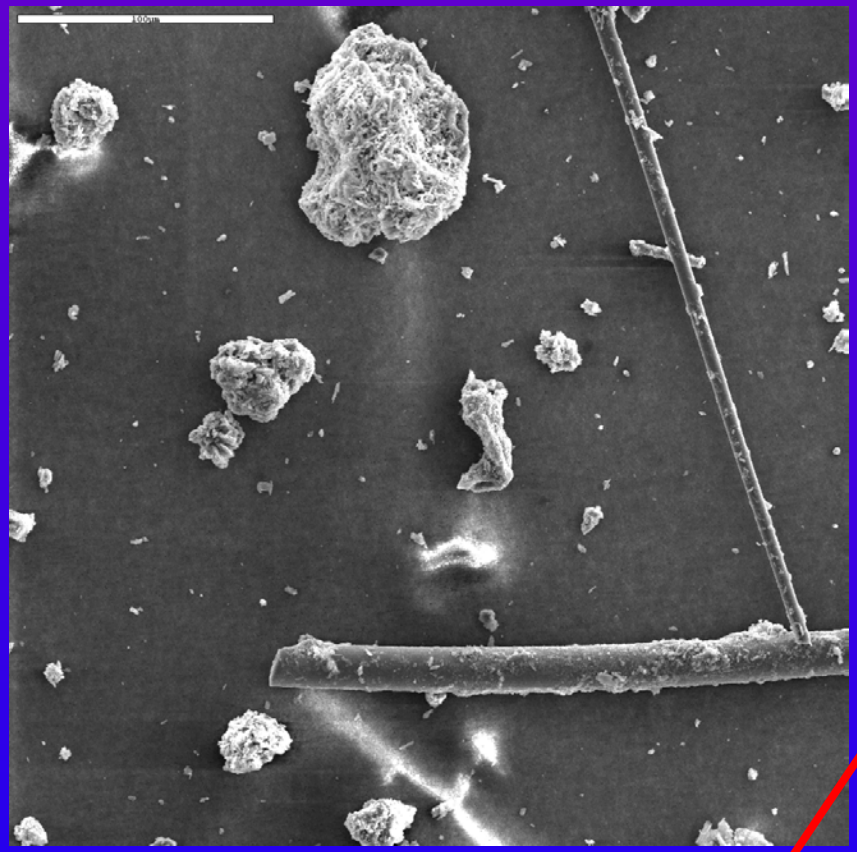


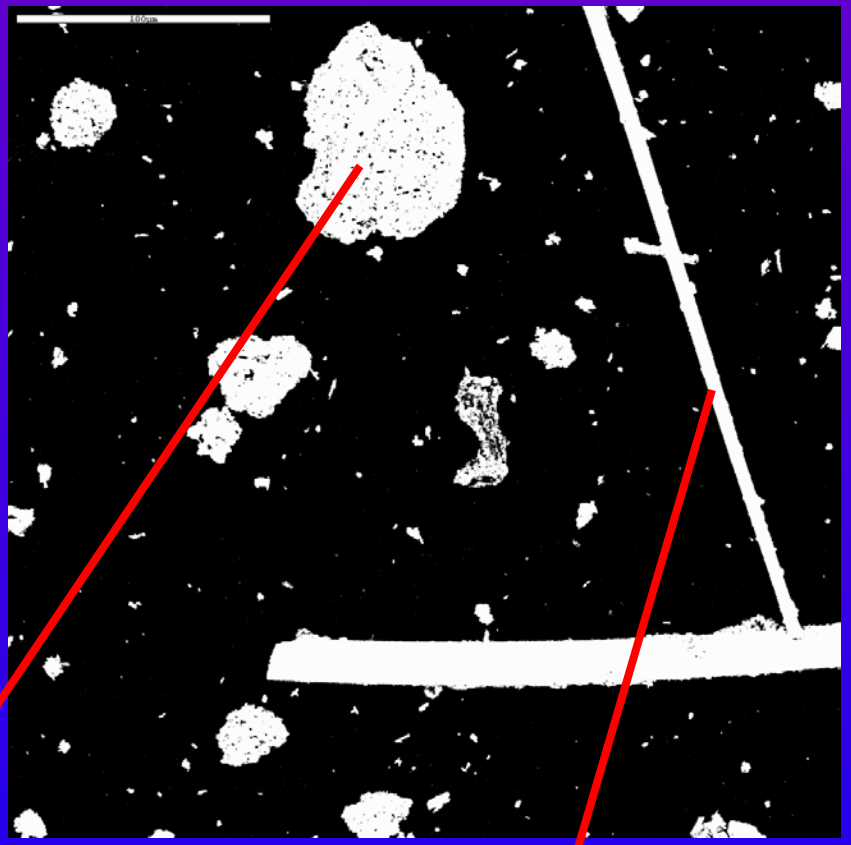


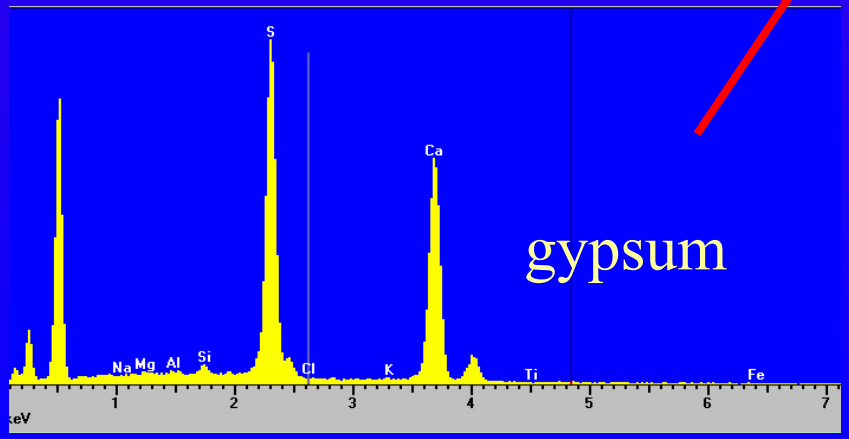


Tower 1

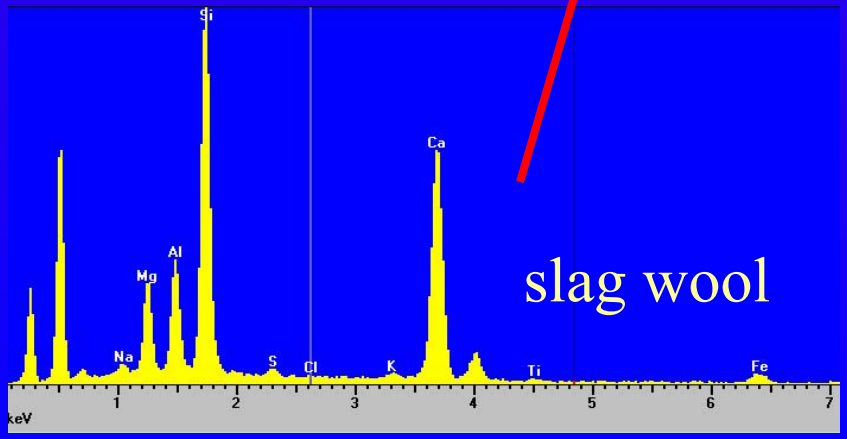
Battery Park







gypsum



slag wool

Environmental Studies of the World Trade Center area after the September 11, 2001 attack.

Roger N. Clark, et al, 2001

U. S. Geological Survey, Open File Report OFR-01-0429

Characterization of the Dust/Smoke Aerosol That Settled East of the World Trade Center (WTC) in Lower Manhattan after the Collapse of the WTC 11 September 2001

Lioy, P.J., et al, 2002

Environ. Health Perspect. 110

Chemical Analysis of World Trade Center Fine Particulate Matter for Use in Toxicologic Assessment

McGee, et al, 2003

Environ. Health Perspect. 111

Comparisons of the Dust/Smoke Particulate that Settled Inside the Surrounding Buildings and Outside on the Streets of Southern New York City after the Collapse of the World Trade Center, September 11, 2001

Lih-Ming Yiin, et al, 2004

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We already know what is in the bulk dust

i.e. We know the signature "semi-quantitatively"

Questions to answer

- Are signature components present in background samples?
- At what dilution levels is the signature no longer useful?
- Does the signature change with distance/elevation?
- Is the signature consistent with different sample types – wipe, microvac, air?
- How variable are the signature components from sample to sample?
- Is the relationship between signature components and COPCs consistent

What we need

- Background samples
- Samples containing different dilutions of WTC dust. *We will need to make some or all of these samples.*
- Protocols for collecting new samples that are compatible with the analytical techniques to be used. Example: filters must have low background for trace element and organic analysis.
- Protocols for collecting new samples that accurately reflect the level of contamination.